

and in a locality not very distant from mine, the earth from Lough Island-Reavey is almost wholly different, including but few species, and the more numerous of these found but sparingly in the Lough Mourne deposits.

The following make up nearly the entire mass of the earth described by Dr. Drummond:—

Navicula gracilis.
Himantidium arcus.
 — *pectinale*.

Tabellaria fenestrata.
 — *ventricosa*.

A few frustules of the following also occur:—

Surirella splendida.
Navicula viridis.

Epithemia zebra.
Cocconema lanceolata.

The profusion in which *N. gracilis*, *H. pectinale* and *T. fenestrata* occur in this deposit, would lead to the conclusion that the waters of the lake in which it had been found were the drainage of a subalpine district, whose surface was almost exclusively peat, while the Lough Mourne deposit would, even to the philomicros unacquainted with its locality, indicate the neighbourhood of clear springs, grassy pastures and a low elevation. In this way these minute organisms may afford matter for interesting speculation, and when occurring in a fossil state may possibly be made available in the researches of the geological inquirer.

Wareham, January 10, 1850.

XV.—*Notes on Chalcidites, and Descriptions of various new species.* By FRANCIS WALKER, F.L.S.

[Continued from vol. iii. p. 210.]

CAUDONIA, n. g.

Fem. Head and chest convex, very finely shagreened: head thick, a little broader than the chest: feelers slender, subclavate; first joint long, slender; second cup-shaped; third and fourth very small; the following from the fifth to the tenth successively but slightly decreasing in length and increasing in breadth; club long-elliptical, broader than the tenth joint, and more than twice its length: chest spindle-shaped, much developed: fore-chest rather long, having a slight transverse ridge near the hind-border whence it declines and grows narrower and forms a short neck: shield of the mid-chest very long; sutures of the parapsides distinct for rather more than two-thirds of the length of the chest, but thence quite obsolete; axillæ parted by rather less than one-fifth of the breadth of the chest; scutcheon nearly conical, with a slight transverse suture towards the hind-border; hind-scutcheon transverse, but rather large: hind-chest well developed, obconical, declining, with a ridge along the middle and a suture on each side: petiole short: abdomen long-oval, smooth, shining, slightly concave above, rather deeply keeled beneath, somewhat broader and a little shorter than the chest; metapodeon occu-

pying nearly one-fourth of the back; ootoon and all the following segments of moderate size; the keel beneath forms an angle beyond one-half of its length, and thence rises abruptly to the tip, and emits the oviduct at about half its length between the angle and the tip: legs slender: wings of moderate size; ulna shorter than the humerus; radius full as long as the ulna; cubitus moderately long, full one-fourth of the length of the radius; brand small, round.—This genus is allied to *Trigonoderus*, *Hetroxys* and *Notanisus*.

Caudonia Agylla, fem. *Æneo-viridis*, abdomine rufo basi cupreo apice viridi, antennis nigris, pedibus rufis, alis subfulvis.

Head coppery: eyes and eyelets dark red: feelers black, shorter than the chest; first joint tawny, piceous at the tip: chest coppery green: front of the fore-chest almost black: hind-chest brassy: abdomen pale red, dark bronze-colour at the base above, green at the tip: oviduct tawny: legs pale red; four hinder feet tawny with piceous tips: wings pale tawny; veins darker tawny; brand pale brown. Length of the body $1\frac{1}{2}$ line; of the wings $2\frac{3}{4}$ lines.

England. In the collection of Mr. Dale.

Encyrtus Status, fem. *Cyaneus*, capite cupreo, abdomine nigro, antennis piceis albo-cinctis apice nigris, pedibus nigris, tarsis fulvis, alis nigro-fuscis.

Head and chest convex: head coppery, large, most roughly punctured, hardly broader than the chest; crown and front very broad: eyes dark red: feelers subclavate, more than half the length of the chest; joints from the first to the sixth piceous; first joint long, slender, broader towards the tip; second cup-shaped; the following joints to the eighth slightly and successively decreasing in length; seventh and eighth joints white; club black, long-conical, broader than the eighth joint and more than twice its length: chest very short, a little longer than broad, dark blue, very finely punctured: fore-chest very short, but visible above: shield of the mid-chest short and broad; no traces of the sutures of the parapsides; axillæ long and narrow, just meeting on the back; scutcheon large, obconical, rather flat above, with a very slight furrow from the fore-border to the disc: hind-chest and petiole extremely short: abdomen triangular, flat, smooth, shining, black, shorter than the chest, but exceeding it in breadth near the base: legs stout, black; feet tawny with piceous tips; fore-feet darker than the rest; middle legs having the feet dilated as usual, and the tips of the shanks armed with two black spines: wings dark brown, somewhat dilated above the humerus; veins piceous; ulna not half the length of the humerus; radius and cubitus shorter than the ulna; brand extremely small. Length of the body $\frac{1}{2}$ line; of the wings $1\frac{1}{4}$ line.

England. In the collection of Mr. Dale.

Callimome eurynotus (Fœrster MSS.), mas. *Viridis*, abdomine purpureo basi cyaneo, antennis nigris, pedibus flavis, femoribus et metatibiis viridibus, alis limpidis.

Head and chest convex, green, finely shagreened, rather thickly

pubescent: head hardly broader than the chest: eyes and eyelets red: feelers black, compact, rather stout, nearly filiform, clothed with yellow down, nearly as long as the chest; first joint long, slender, green; second cup-shaped, shining, not pubescent; third and fourth extremely minute; fifth and following joints nearly equal in length; club long-conical, rather more than twice the length of the preceding joint: chest long-elliptical: fore-chest rather long, narrower and rounded in front; its length rather more than half its breadth: shield of the mid-chest very long; sutures of the parapsides very strongly marked; axillæ parted by rather less than one-fourth of the breadth of the chest; scutcheon nearly rhomboidal, almost smooth at the tip, where it forms a ridge and thence declines very abruptly; hind-scutcheon short but distinct: hind-chest of moderate size, obconical, declining, nearly smooth: petiole very short: abdomen convex, spindle-shaped, smooth, shining, bright purple, rather hairy, bright blue at the base, narrower than the chest and but little more than half its length; metapodeon occupying about one-third of the back, concave at the base; its hind-border convex, and passing over the back of the octoon which is short; ennaton longer than the octoon; decaton longer than the ennaton; the three following segments shorter: sexual parts piceous, rather long: legs yellow; hips, thighs and hind-shanks green; trochanters and knees tawny; tips of feet brown: wings colourless, pubescent; veins brown; ulna full half the length of the humerus; radius rather more than one-third of the length of the ulna; cubitus very short, not more than one-third of the length of the radius; brand very small, forked, emitting a short branch. Length of the body $1\frac{1}{2}$ line; of the wings 3 lines.

Allied to *C. versicolor* and to *C. cyaneus*.

Prussia. In the British Museum.

Ormyrus cæruleus (Foerster MSS.), fem. *Viridi-cyaneus, purpureo et cupreo varius, antennis nigris, tarsis fulvis, proalis plerumque fuscis.*

Head finely shagreened, bright green, purplish blue on the crown, broader than the chest: eyes and eyelets red: feelers black, clavate, not longer than the chest; first joint long, slender; second cup-shaped; third and fourth very small; the following from the fifth to the tenth successively increasing in breadth, but hardly decreasing in length; club conical, broader than the tenth joint and about thrice its length: chest blue, nearly elliptical, very convex, shining, transversely rugulose, but appearing almost smooth, the marks being very slight: fore-chest very short; its length not more than one-eighth of its breadth: shield of the mid-chest large, roughly punctured, much broader than long; sutures of the parapsides indistinct; scutcheon obconical above, having a rim behind whence it declines abruptly and forms a right angle; axillæ parted by nearly one-third of the breadth of the chest: hind-chest transverse, rough, very short: petiole extremely short: abdomen long, obconical, convex, shining, rather hairy, especially towards the tip, finely punctured, denticulate and with rows of large punctures across each segment, smooth at

the base, tapering towards the tip, keeled beneath, about twice the length of the chest; metapodeon bright coppery green along the hind-border, rather less than one-fourth of the length of the abdomen; octoon coppery green, not half the length of the metapodeon; ennaton a little longer than the octoon, coppery, purplish blue at the base; decaton a little longer than the ennaton, with which it agrees in colour; protelum coppery, much shorter than the decaton; paratelum spindle-shaped, slightly compressed, much longer than the decaton; telum about half the length and breadth of the paratelum: oviduct springing from the base of the abdomen and reposing in a groove from thence to the tip: legs bluish green; shanks armed with two spines at their tips, those of the four hinder shanks long; trochanters piceous; knees and feet tawny; tips of the latter piceous: wings pubescent, but nearly naked at the base, and along two narrow lines which have a common source and pass along nearly the whole length of the wing; there is a large pale brown spot in the disc of each fore-wing beneath the ulna; veins piceous; ulna a little more than half the length of the humerus; radius about one-fourth of the length of the ulna; cubitus thick and extremely short, not half the length of the radius; brand none. Length of the body $1\frac{1}{2}$ line; of the wings 2 lines.

Prussia. In the British Museum.

Pachyneuron Pruni (Foerster MSS.), fem. *Viridi-cyaneus, abdomine angusto, antennis nigris, pedibus fulvis, mesotarsis et metatarsis flavis, alis limpidis.*

In structure like *P. formosum*: head and chest greenish blue, finely shagreened: feelers black: abdomen oval, smooth, shining, green or bluish green, depressed above, keeled beneath, much narrower but not longer than the chest: legs tawny; hips green; middle and hind feet yellow with piceous tips: wings colourless; veins piceous; ulna thick, less than half the length of the humerus; radius nearly twice the length of the ulna; cubitus as long as the ulna; brand small. Length of the body $\frac{1}{2}$ – $\frac{3}{4}$ line; of the wings $\frac{1}{2}$ – $1\frac{1}{2}$ line.

Prussia. In the British Museum.

Pteromalus laticeps (Foerster MSS.), fem. *Aëneo-viridis, capite et scutello cyaneis, abdomine purpureo-cupreo, basi viridi, antennis nigris, pedibus flavis, femoribus protibiis et protarsis fulvis, alis limpidis.*

Head and chest convex, finely shagreened: head dark blue, a little broader than the chest: eyes and eyelets red: feelers pubescent, black, clavate, as long as the chest; first joint long, linear, bright pale yellow; second piceous, shining; third and fourth very small; the following joints from the fifth to the tenth successively increasing in breadth and decreasing in length; club conical, hardly broader than the tenth joint, but about twice its length: chest coppery green, nearly oval, narrower behind: fore-chest rather short, convex in front, concave behind; its length about one-fourth of its breadth: shield of the mid-chest broader than long; sutures of the parapsides

very indistinct; axillæ parted by nearly one-fourth of the breadth of the chest; scutcheon dark blue, truncate-conical, with a very indistinct transverse suture across the disc: hind-chest well developed, obconical, declining, somewhat excavated at the base, and having a ridge along the middle and a rim on each side: petiole very short: abdomen nearly oval, smooth, shining, purplish bronze, bright green at the base, flat above, keeled beneath, slightly tapering at the tip, narrower and much shorter than the chest; metapodeon conical, convex till near its tip, occupying nearly one-fourth of the length of the back; octoon not half the length of the metapodeon; each of the four following segments as long as the octoon; telum narrow, somewhat longer; the abdomen forms a very obtuse angle in the middle of the underside: legs tawny; four hinder legs with bright pale yellow shanks and feet, tips of the latter piceous: wings colourless, pubescent; veins tawny; ulna full half the length of the humerus; radius longer than the ulna; cubitus rather more than half the length of the ulna, slightly curved; brands very small. Length of the body $1\frac{3}{4}$ line; of the wings $3\frac{1}{4}$ lines.

Prussia. In the British Museum.

Smiera Ampyx, fem. Ferruginea, pedibus flavis, alis limpidis.

Tawny: feelers linear, rather longer than the chest: mouth yellow: petiole as long as the abdomen, which is elliptical, smooth, shining, slightly compressed, much shorter and narrower than the chest: fore-legs and middle-legs yellow: hind-coxæ large, armed above toward their tips with a few small teeth; hind-thighs dilated, beset with a row of small teeth along the underside, and armed with a larger tooth at the base: shanks curved, fitted to the thighs, each ending in a spine: wings colourless; veins piceous; a small brown spot on the stigma. Length of the body $1\frac{1}{4}$ line; of the wings 2 lines.

West Indies. In Mr. Clear's collection.

Smiera Fidius, fem. Rufa, nigro flavoque varia, antennis nigris, alis limpidis.

Red: head finely punctured; front and underside yellow: eyes and eyelets pale red: jaws curved, each armed with three short brown teeth: feelers linear, black, somewhat piceous beneath, as long as the chest; first joint long, slender, yellow, black at the tip: thorax roughly punctured; sides marked with yellow: breast mostly black: a black line passes along the back of the scutum of the mesothorax: metathorax black: petiole short: abdomen obconical, downy, shining, very finely punctured, black towards the tip, narrower and a little longer than the chest: fore-legs and middle-legs bright yellow; hind-coxæ yellow, tinged with red above, and each having a black spot on the outside; hind-thighs red, each armed beneath with a row of small teeth along the lower edge, and having a larger tooth at the base: hind-shanks curved and applied to the thighs, yellow towards the base which is black, having a black band across the middle, reddish at the tips which are produced into spines: hind-feet yellow, their tips piceous: wings colourless; veins piceous; ulna above half

the length of the humerus; radius a little longer than the ulna; cubitus short, hardly one-fourth of the length of the radius, with which it forms a very acute angle; stigma very small. Length of the body $2\frac{1}{4}$ lines; of the wings 3 lines.

West Indies. In Mr. Clear's collection.

Smiera Pratinas, mas. *Rufa, nigro varia, antennis nigris, pedibus nigro flavoque variis, alis fuscis.*

Bright red: head and chest roughly punctured: crown of the head black; a spot of the same colour along the lower edge of the eye: fore-chest with a large black spot on its back, and a smaller spot on each side; there is also a small black spot on each of the epimera of the middle chest: petiole long: abdomen smooth, shining, short, broad not nearly so long as the chest: feelers black, nearly linear, as long as the chest; first joint rather broad, red at the base, forming a very obtuse angle beneath; second and third joints very short; fourth and following joints of moderate size, hairy, closely joined together, and successively decreasing in length; tenth and three following joints yellow: fore-legs and middle-legs simple, hairy; hips and thighs red, the latter tinged with black; shanks black with yellow tips; feet yellow; the joints successively decreasing in length till the fifth, which is somewhat longer than the fourth: hind-legs red; hips large, obclavate, black towards the tips, and that especially on the upper side; thighs very large, compressed-oval, armed beneath with about twelve small teeth; shanks dark red, black at the base and towards the tips, curved and fitted to the thighs: wings dark brown; veins pitch-colour. Length of the body 2 lines; of the wings 4 lines.

West Indies. In Mr. Clear's collection.

Chalcis Resus, fem. *Nigra, pedibus flavis, metafemoribus nigro vittatis, alis sublimpidis.*

Black: head and thorax dull, punctured, clothed with bright yellow hairs, especially at the tip of the scutellum: abdomen smooth, shining, clothed above with a few hairs: antennæ black: legs yellow; hind-thighs black on the inside and having a large spot of the same colour on the outside, armed beneath with eight small black teeth, and having also one larger yellow tooth near the base: wings nearly colourless or slightly tinged with brown; squamulæ yellow; veins piceous, paler towards the base of the wings. Length of the body 3 lines; of the wings 5 lines.

Sierra Leone. In Mr. Clear's collection.

Palmon Idomene, mas et fem. *Cyaneo-viridis, abdomine aneo aut purpureo, subtus fulvo, oviductu corporis longitudine, antennis pedibusque flavis, metapedibus purpureo-fulvis, alis sublimpidis.*

Male. Head and chest scaly: head green, hardly broader than the chest which is bluish green: eyes and eyelets red: abdomen obclavate, slender, flat, bronze-colour, tawny beneath towards the base, nearly as long as the chest: feelers subclavate, yellow, less than half the length of the body; first joint long, slender, linear; second cup-

shaped; third and fourth very minute; fifth and following joints subquadrate, of moderate size, successively but slightly decreasing in length; eleventh, twelfth and thirteenth joints forming an oval club which is broader than the tenth joint and more than twice its length: legs yellow; fore-legs and middle-legs of moderate size; fore-feet having the first joint long and dilated, the second, third and fourth very small, the fifth longer; middle-feet with the first joint dilated and very long; the second large, but smaller than the first; the third, fourth and fifth very short: hind-legs tawny, tinged excepting the feet with bluish purple; hips very long; thighs very large, compressed-oval, armed on the inside with several teeth, rather less dilated than those of the female; shanks curved and fitted to the inside of the thighs; first and second joints of feet dilated, second much shorter than the first; third, fourth and fifth pale yellow, very small; claws and foot-cushions black: wings rather narrow; fore-wings slightly tinged with brown; veins tawny; humerus long; ulna much shorter; radius about one-third of the length of the ulna; cubitus much shorter than the radius; stigma very small.

Female. Abdomen purple, compressed, nearly as long as the chest, tawny and keeled beneath; the keel increasing in depth from the base to the tip: oviduct and its sheaths yellow and as long as the body: thighs and hind-hips tinged with bluish purple; feet simple, first joint long, second and following joints very small. Length of the body $1\frac{1}{4}$ – $1\frac{1}{2}$ line; of the wings $2\frac{1}{2}$ lines.

Sierra Leone. In Mr. Clear's collection.

Urolepis Cychreus, mas. Cupreus, antennis fulvis, pedibus rufescentibus, alis immaculatis.

Copper-colour: head and chest convex, very minutely shagreened: head a little broader than the chest: eyes and eyelets piceous; the latter near together on the crown of the head, the middle one a very little in advance of the other two: front green, slightly impressed: feelers tawny, nearly filiform, rather shorter than the chest; first joint long, slightly curved; second long cup-shaped; third and fourth very small; fifth and five following joints of moderate and nearly equal size; eleventh, twelfth and thirteenth joints forming a long conical club, which is twice the length of the tenth joint: chest large: fore-chest short, narrower in front: scutum of the middle-chest broad; sutures of the parapsides indistinct, especially towards the hind-border where they approach each other; axillæ large, separated by rather less than one-third of the breadth of the scutum; scutellum nearly hexagonal, with a transverse line near its hind-border: hind-chest large, obconical, slightly declining, having a ridge down the middle and one on each side, whereby it is divided into two compartments; it is rugulose on the outer sides of the compartments, on the tip of whose middle ridge there is a shield-shaped protuberance: petiole very short: abdomen nearly round, smooth, shining, slightly convex, a little more than half the length of the chest; first segment large, its disc hollow; second large; third and following

segments short: legs dull red; feet pale red, their tips brown: wings ample, tinged with tawny colour; veins tawny; ulna hardly half the length of the humerus; radius longer than the ulna; cubitus much shorter than the ulna; stigma small, brown. Length of the body $1\frac{1}{4}$ line; of the wings $2\frac{1}{4}$ lines.

“Found on the edge of the pond in the Zoological Gardens, Phoenix Park, Dublin (in September), where *Notiphila cinerea* and *Ephydra littoralis* (or *coarctata*) were abundant. Perhaps a parasite of the latter, as *Ur. maritimus* is of *Ephydra riparia*.” Haliday MSS.

In the collection of Mr. Haliday.

Panstenon Pidius, mas. *Cyaneo-viridis, abdominis disco purpureo-cupreo, antennis fulvis, pedibus flavis, alis perangustis.*

Body bluish green, very long and narrow: head and chest scaly: head much broader than the chest; front impressed: feelers tawny, slender, filiform, inserted in the front, nearly half the length of the body; first joint long and rather stout; second stout and cup-shaped; third and fourth hardly visible; fifth and following joints small, nearly equal in size; eleventh, twelfth and thirteenth forming a spindle-shaped club about twice the length of the tenth joint: chest spindle-shaped: fore-chest short: scutum of the middle-chest rather long; sutures of the parapsides not distinct; scutellum obconical, of moderate size: hind-chest large, subquadrate, hardly declining: petiole yellow, nearly one-sixth of the length of the abdomen, which is spindle-shaped and somewhat shorter than the chest; disc purplish copper; segments of moderate size, slightly decreasing towards the tip: legs pale yellow, long and slender; middle-feet and hind-feet pale straw-colour; tips of the feet tawny: wings extremely narrow, with a slight yellow tinge, more or less shorter than the body; veins yellow; ulna much shorter than the humerus; radius shorter than the ulna; cubitus of moderate length; stigma small. Length of the body $\frac{3}{4}$ line; of the wings $\frac{3}{4}$ –1 line.

Distinguished from *P. Oxylyus* by its much narrower wings and by other characters.

Ireland. In Mr. Haliday's collection.

Panstenon Oxylyus, reared by Mr. Haliday from the pupa of a Dipterous insect (*Agromyza Pisi*, Kaltenbach) on the pea.

Prosopon montanum.—*Female*. Head and chest brassy green, covered with fine scales: feelers black, clavate, twelve-jointed, about one-third of the length of the body; first joint long, rather slender, tawny beneath and at the base; second cup-shaped; third very short; fourth and following joints short, closely joined together, successively but slightly decreasing in length; tenth, eleventh and twelfth joints forming an elliptical club which is broader than the ninth joint and more than thrice its length: abdomen smooth, purple varied with green and copper colour on the sides and at the tip, somewhat elliptical, nearly flat above, slightly keeled beneath, a little broader and longer than the chest; first segment short, convex along the hind-border; second rather longer, also convex on the hind-border; third

short, with a straight hind-border; fourth, fifth and sixth of moderate size, with straight hind-borders; seventh extremely small: middle-legs not dilated.

In other characters it resembles the male.

Found by Mr. Haliday with the ♂ on mountain heaths near Belfast, both pretty common.

Ericydnus Æmnestus, fem. *Viridis, antennis nigris, abdomine basi pedibusque rufis, alis vix ullis.*

Head and chest dark green, shining, convex, very finely sha-greened: head broader than the chest; crown large; front convex: eyes and eyelets dark red: feelers black, clavate, much shorter than the body; first joint long, slender; second long cup-shaped; third and following joints to the ninth successively shorter and broader; tenth, eleventh and twelfth joints forming a spindle-shaped club which is more than twice the length of the ninth joint: chest elliptical: fore-chest short, narrower in front: scutum of the middle-chest short and broad; scutellum obconical: abdomen sessile, convex, dark green, obconical, pale red towards the base, narrower and much shorter than the chest; there are a few hairs towards the tip which is deeply keeled beneath: legs pale red; middle legs dilated as usual, their shanks armed with long spines; hind-shanks rather dark; tips of the feet brown: wings rudimentary. Length of the body $\frac{2}{3}$ line. *E. strigosus* ♀?

Ireland. In Mr. Haliday's collection.

PROCEEDINGS OF LEARNED SOCIETIES.

ZOOLOGICAL SOCIETY.

Feb. 27, 1849.—William Yarrell, Esq., Vice-President, in the Chair.

The following papers were read:—

1. DESCRIPTION OF TWO NEW SPECIES OF CYPRÆA.

BY JOHN S. GASKOIN.

CYPRÆA CRIBELLUM. *Cyp. testâ subcylindricâ, lævi, albâ, bruneo omnino obtectâ, præter maculis numerosis, testâ concoloribus, ferè circularibus, inæqualibus et irregulariter dispensatis; marginibus bruneo-rufescente punctatis; basi subplanulatâ, albâ; aperturâ latâ, præcipuè anticè; columellâ ventricosiusculâ; dentibus labii prominentibus, æqualibus, circa quindecim; dentibus columellaribus subobsoletis (præter dente primo) circa duodecim; dente primo majus prominente deinde anticè est incisura profunda; sulco columellari nullo, extremitatibus anticis leviter productis, externè valdè convergente; canali lato et profundo; extremitatibus posticis obtusis; canali postico lato, aperturâ rectè continuo; margine externo incrassato; spirâ latè umbilicatâ.*

Shell subcylindrical, smooth, white, covered by a dark-brown coating except at numerous nearly circular white spots, of unequal sizes and irregular distribution, thus leaving at those spots the colour of the